

Message

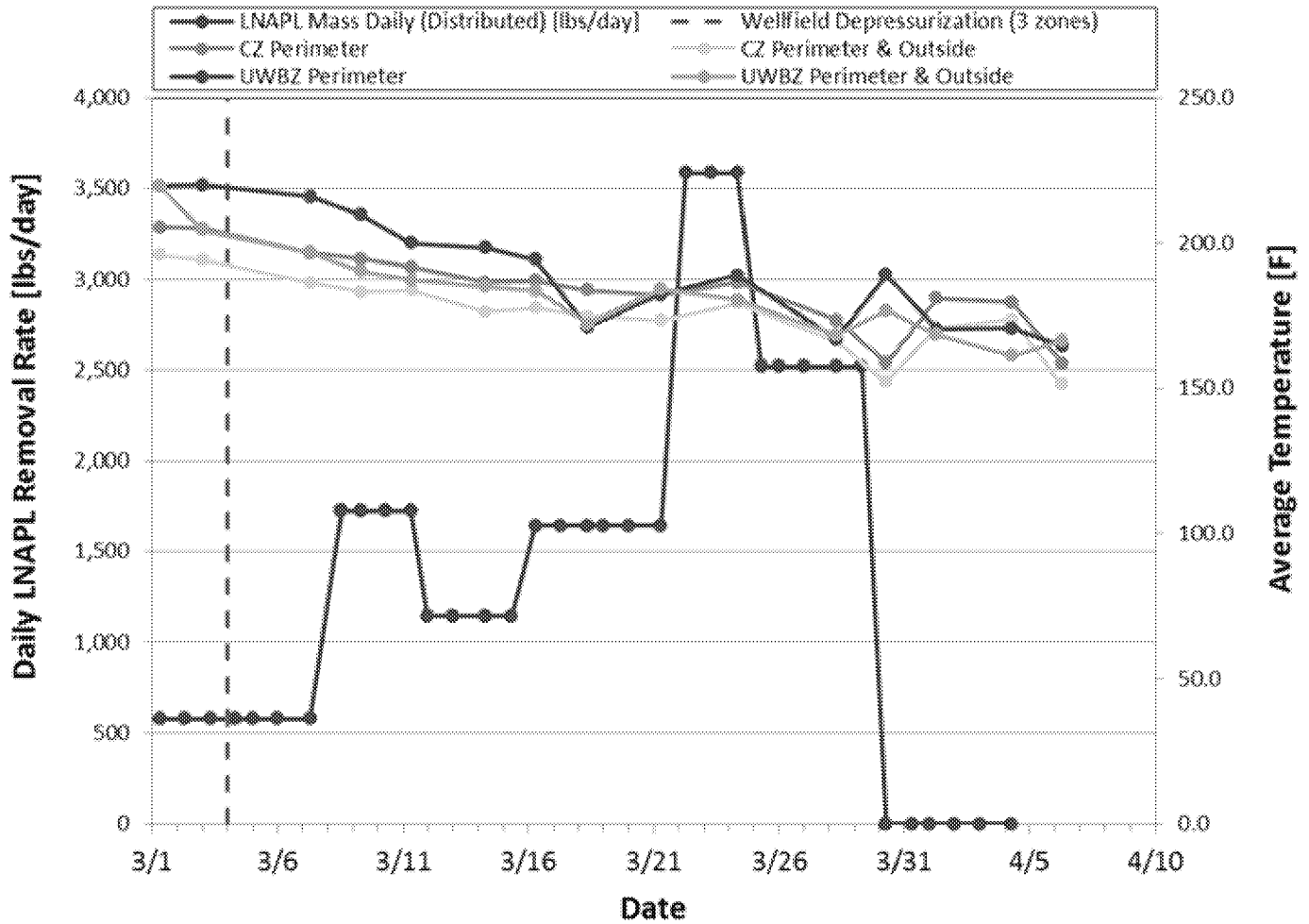
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**From:** Smallbeck, Donald R. [donald.smallbeck@amecfw.com]  
**Sent:** 4/12/2016 11:01:36 PM  
**To:** Davis, Eva [Davis.Eva@epa.gov]; JERRARD, CATHERINE V GS-13 USAF HAF AFCEC/CIBW [catherine.jerrard@us.af.mil]; Geoffrey Watkin [Geoffrey.Watkin@cn-bus.com]; d'Almeida, Carolyn K. [dAlmeida.Carolyn@epa.gov]; Wayne Miller [Miller.Wayne@azdeq.gov]; Pearson, Stuart C. [stuart.pearson@amecfw.com]  
**CC:** Steve Willis [steve@uxopro.com]; Bo Stewart [Bo@praxis-enviro.com]; Devon Phelan [dphelan@terratherm.com]; Gorm Heron [gheron@terratherm.com]; Steffen Griepke [sgriepke@terratherm.com]; Dan Pope [DPope@css-dynamac.com]  
**Subject:** RE: ST012 Status Update regarding SEE decommissioning

Eva

We were monitoring the calculated formation temperatures from the MPE wells (included as Table 6 in the Weekly Progress Reports). Generally, we have seen perimeter temperatures decrease throughout this depressurization cycle. The figure below shows the daily LNAPL production rate and the average CZ and UWBZ TTZ perimeter and perimeter/outside the perimeter calculated MPE well formation temperatures during the depressurization cycle. The LNAPL production rate had a delayed peak during the depressurization cycle and may be related more to the hydraulic changes across the site during the depressurization cycle as the steam bubble collapsed than a direct correlation with the perimeter well temperatures.

## Distributed Daily LNAPL Removal Rate vs. Formation Temperatures



The total amount of LNAPL removed during this depressurization cycle is 47,019 lbs (through 4/4/16).

Please let us know if you have any questions or if there is additional information that we can provide.

**D.R. Smallbeck**  
Principal Program Manager  
Construction Remediation

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**From:** Davis, Eva [<mailto:Davis.Eva@epa.gov>]

**Sent:** Friday, April 08, 2016 1:47 PM

**To:** Smallbeck, Donald R.; JERRARD, CATHERINE V GS-13 USAF HAF AFCEC/CIBW; Geoffrey Watkin; d'Almeida, Carolyn K.; Wayne Miller; Pearson, Stuart C.

**Cc:** Steve Willis; Bo Stewart; Devon Phelan; Gorm Heron; Steffen Griepke; Dan Pope  
**Subject:** RE: ST012 Status Update regarding SEE decommissioning

Don – which perimeter wells were you monitoring temperatures in? I'm not aware of wells at the perimeter of what was the steam zone outside of the treatment area that could give you a good read on this. What was the total amount of LNAPL recovered during this depressurization cycle? Thanks Eva

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**From:** Smallbeck, Donald R. [<mailto:donald.smallbeck@amecfw.com>]

**Sent:** Friday, April 08, 2016 12:38 PM

**To:** JERRARD, CATHERINE V GS-13 USAF HAF AFCEC/CIBW <[catherine.jerrard@us.af.mil](mailto:catherine.jerrard@us.af.mil)>; Geoffrey Watkin <[Geoffrey.Watkin@cn-bus.com](mailto:Geoffrey.Watkin@cn-bus.com)>; d'Almeida, Carolyn K. <[dAlmeida.Carolyn@epa.gov](mailto:dAlmeida.Carolyn@epa.gov)>; Davis, Eva <[Davis.Eva@epa.gov](mailto:Davis.Eva@epa.gov)>; Wayne Miller <[Miller.Wayne@azdeq.gov](mailto:Miller.Wayne@azdeq.gov)>; Pearson, Stuart C. <[stuart.pearson@amecfw.com](mailto:stuart.pearson@amecfw.com)>

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**Subject:** ST012 Status Update regarding SEE decommissioning

## BCT Members

On behalf of the Air Force, Amec Foster Wheeler is providing this interim update on ST012 to keep the BCT apprised of data collected since the last BCT meeting and upcoming plans. Depressurization has been ongoing at ST012 since 4 March 2016 (4 ½ weeks). Liquid LNAPL production initially increased and peaked approximately 3 weeks into the depressurization then rapidly declined to current recovery rates averaging less than 150 pounds (<25 gallons) per day over the past week. No LNAPL has been generated since April 3, 2016. An associated cooling of the perimeter has not been observed to correlate with the decrease in liquid LNAPL recovery, therefore, there is no significant benefit for further steam injection. Based on continued reductions in LNAPL recovery and expected decline of perimeter temperatures below steam levels, the multiphase extraction is expected to continue until approximately 29 April 2016.

In order to support the transition to EBR drilling and construction, the initial step in the decommissioning process is decommissioning of the steam boilers which is scheduled for the week of 11 April 2016. Monitoring of mass recovery rates and temperatures will continue and based on future data may extend the current estimated extraction timeframe if steam temperatures are still present on the perimeter. The final steps of SEE decommissioning and implementation of EBR construction will be ongoing in May, June, and July. Once SEE wells are disconnected from the SEE piping, they will be periodically checked for LNAPL accumulation and LNAPL will be removed if significant volumes accumulate (e.g., >5 feet) in accordance with existing SOPs. Further updates on the SEE decommissioning/EBR implementation schedule will be provided on the BCT call on 21 April 2016.

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